

May 12, 1969

Dr. Klaus Mampell
International R&D Incorporated
6303 Waterway Place
Falls Church, Virginia 22044

Dear Dr. Mampell,

It was good to hear from you. I have a very vivid recollection of your work during the forties on "Epidemics" of mutation. It must be very gratifying to you to be able to feel now that the virus theory has a much more substantial theoretical basis than it was possible at that time.

I am enclosing a bibliography of the most significant items I have encountered so far on the actions of chlorine. We have confirmed the in-activation of DNA by chloramine and also found a nice correlation between radiation-resistance and chlorine-resistance. We are pursuing the question of mutagenesis at the present time.

I do not see any possibility of doubt that chlorine is a potential mutagenic agent and that everything now rests on the chemical forms by which it may penetrate the body. For this reason I think it is very important that you maintain tight control of the constituents of the medium that you use for cultivating *Drosophila* as well, perhaps, as the associated microorganisms. In fact, unless you are already working with sterile cultures it is going to be difficult to eliminate differential antimicrobial effects as part of the causes of the changes you find. There is little doubt that *Drosophila* ordinarily get significant parts of their essential growth factors from microorganisms unless the diet is especially constructed to be innately complete.

I would be interested to see any material that you develop on the subject as well as any other literature that you may discover. We have found it very difficult to collect this in any straightforward way and from time to time discovered new material that we had not previously suspected.

Sincerely yours,

Joshua Lederberg
Professor of Genetics

Enclosure
JL/rr